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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/027,580  
Filing Date: December 21, 2001  
Appellant(s): GUPTA, SUNIL K.

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Mr. Gary D. Yacura  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed appealing from the Office action mailed.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6587824	Everhart	5-2000
6185535	Hedin	10-1998

6161090

Kenevsky

3-1999

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 8-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everhart et al. (US 6587824) in view of Hedin et al. (US 6185535).
2. Regarding claim 8, Everhart et al. disclose a speech recognition system, comprising:
  - a client device receiving an utterance from a user (*element 76 in figure 6*);
  - the client device comparing said received utterance to a stored recognition vocabulary representing a currently active vocabulary (*element 78 in figure 6*),
  - recognizing the received utterance and dynamically modifying the stored recognition vocabulary to improve recognition accuracy for subsequent received utterance, wherein the client device enables the user to create a replacement command word that is stored in the stored recognition vocabulary as a replacement command word corresponding to the received utterance, where the user's utterance was not recognized by the client device (*col. 7, line 28 to col. 8, line 26, particularly col. 8, lines 17-24*).

Everhart et al. fail to specifically disclose a server in communication with the client device. However, Hedin et al. teach a server in communication with the client device (*referring to figures 1a-b and 3*).

Since Everhart et al. and Hedin et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Everhart et al. by incorporating the teaching of Hedin et al. in order to provide a multi-user environment where each user's profile is stored at the central server (*col. 1, lines 56-67*).

3. Regarding claims 9-10, Everhart et al. further disclose the step of dynamically modifying of the stored recognition vocabulary is dependent on a current state of user interaction in a voiced dialog of the user that includes the utterance and on a recognition result from the comparison (*col 5, lines 10-44, appropriate voice command set is retrieved for recognition*), and an application configured to dynamically modify the stored recognition vocabulary (*col. 7, line 28 to col. 8, line 26*).

4. Regarding claim 11, Everhart et al. fail to specifically disclose the system of claim 8, the server further including a vocabulary builder application configured to dynamically modify the stored recognition vocabulary by sending data to client application. However, Hedin et al. teach the server further including a vocabulary builder application configured to dynamically modify the stored recognition vocabulary by sending data to client application (*col 11, lines 41-46*).

Since Everhart et al. and Hedin et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Everhart et al. by incorporating the teaching of

Hedin et al. in order to improve speech recognition accuracy of subsequent recognition of the same word.

5. Regarding claim 14, Everhart et al. further disclose the system of claim 8, the client device further including a processor for comparing a speech template representing the received utterance to said stored recognition vocabulary to obtain a recognition result, wherein the processor controls the client application to modify the stored recognition vocabulary (*element 78 in figure 6*).
6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everhart et al. (US 6587824) in view of Hedin et al. (US 6185535), as applied to claim 8, and further in view of Kenevsky et al. (US 6161090).
7. Regarding claim 13, the modified Everhart et al. fail to specifically disclose that the server further including a database storing client-specific data that is updatable by the client device. However, Kenevsky et al. further teach that the server further including a database storing client-specific data that is updatable by the client device (*col. 7, line 8 to col. 8, line 36, user's model*).

Since the modified Everhart et al. and Kenevsky et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Everhart et al. by incorporating the teaching of Kenevsky et al. in order to provide a security level with an

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arbitrary level of security with speech and speaker recognition technology and natural language understanding. This global architecture has the advantage of being universal and adaptable to substantially any situation.

#### **(10) Response to Argument**

8. In the pre-appeal decision form, mailed 12/7/2007, examiner inadvertently indicated that claims 1-2, 7-11, 13-14, and 22-24 are rejected, when, in fact, only claims 7-11 and 13-14 are rejected. The claims being appealed are 7-11 and 13-14.

9. Applicant argues to traverse the prior art rejection based on arguments regarding "the references are not properly combinable as Everhart teaches away from the Examiner's suggested combination", "there is no suggestion to combine the references", and "impermissible hindsight reconstruction in combining features of Everhart and Hedin" (page 9 of the appeal brief). Applicant's arguments have been fully considered but they are not persuasive because of the following reasons:

10. Although Everhart's invention is directed toward in-vehicle speech recognition application and Hedin's invention is directed toward a distributed speech recognition system, they are from the same field of endeavor, namely speech recognition system. There is no indication of teaching away in both prior art references. Hedin was only relied upon for the teaching of a simple feature of connecting the client device to the

server. There is no indication that Everhart system explicitly excludes the server from being in communication with the client device. In fact, Everhart et al. disclose a speech recognition system having an I/O interface (*item 24, figure 2*). This I/O interface is traditionally known to enable communications between the speech recognition system and the outside world including: the users, voice-controlled accessories, or remote server. From this available I/O interface, one of ordinary skill in the art at the time of invention would readily recognize that a server could be connected to the speech recognition system to provide a multi-user environment where each user's profile is stored at the central server (*col. 1, lines 56-67 as suggested by Hedin*). Furthermore, since independent claim 8 is only claiming of a server being in communication with the client device without providing any kind of service for the client device, Hedin was only relied upon for the teaching of the client device being connected to or in communication with the server, and nothing else. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Everhart's system by combining the teaching of Hedin, specifically the client device in communication or connection with the server, in order to provide a multi-user environment where each user's profile is stored at the central server (*col. 1, lines 56-67*).

11. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was



within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

12. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir.1992). In this case, to enable the user to access services provided by the server, or to provide a multi-user environment where each user's profile is stored at the central server (*col. 1, lines 56-67*).

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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